

## CLAIMS:

1.           Display device comprising a liquid crystal material between a first substrate provided with row electrodes (7) and a second substrate provided with column electrodes (6), driving means (5) for driving the column electrodes (6) in conformity with an image to be displayed, and driving means (4) for driving the row electrodes (7),  
5   wherein during a row selection time at least one row is selected and column voltages ( $G_j(t)$ ) are supplied to the column electrodes (6), wherein the column voltage waveform depends on the grey scale to be displayed by a driven pixel in a certain column and depends on a used selection signal ( $F_i$ ) supplied to the selected row, wherein a column voltage ( $G_j(t)$ ) is switchable between at least two different column voltage levels during  
10   the row selection time and the column voltage waveform for a following row selection time is mirrored on a mirror axis depending on the column voltage at the end of the current row selection time and the column voltage at the end of the following row selection time.
- 15   2.           Display device as claimed in claim 1, wherein the mirroring is performed if the column voltage at the end of the current row selection time is the same as the column voltage at the end of the following row selection time.
3.           Display device as claimed in claim 1 or 2, wherein groups of  $p$  rows are  
20   driven simultaneously and the row electrodes supply groups of  $p$  rows ( $p \geq 1$ ) with mutually orthogonal selection signals ( $F_i$ ) for driving pixels (8), in which pixels (8) are defined by overlapping parts of the row and column electrodes, wherein the column voltage ( $G_j(t)$ ) is calculated depending on the grey scales to be displayed by the  $p$  concurrently driven pixels in a certain column and depending on the used mutually  
25   orthogonal selection signals ( $F_i$ ) for the respective group of  $p$  rows.

4. Display device as claimed in claim 1, wherein the mirroring is done adaptively depending on the picture to be displayed.
- 5 5. Display device as claimed in claim 1, wherein the mirror axis is defined in the middle of a row selection time.
6. Display device as claimed in claim 1, wherein the mirror axis is defined adaptively.
- 10 7. Display device as claimed in claim 2, wherein the row selection time is subdivided into  $n_{\text{pwm}}$  sub slots and the column voltage signal can have  $p+1$  different voltage levels during a row selection time.
- 15 8. Display device as claimed in claim 1, wherein the following column voltage level for the subsequent row selection time is calculated during the current row selection time.
9. Circuit arrangement for driving a display device having row electrodes  
20 (7) and column electrodes (6), the circuit arrangement includes driving means for driving the column electrodes (6) in conformity with an image to be displayed on the display and driving means (4) for driving the row electrodes (7), at least one row electrode is selected during a row selection time and column voltages ( $G_j(t)$ ) are supplied to the column electrodes (6), wherein the column voltage waveform depends  
25 on the grey scale to be displayed by a driven pixel in a certain column and depends on a used selection signal ( $F_i$ ) supplied to the selected row, a column voltage ( $G_j(t)$ ) is switchable between at least two different column voltage levels during the row selection time and the column voltage waveform for a following row selection time is mirrored on a mirror axis depending on the column voltage at the end of the current row selection  
30 time and the column voltage at the end of the following row selection time.

10. Method for driving a display device having row electrodes (7) and column electrodes (6) wherein during a row selection time at least one row is selected and column voltages ( $G_j(t)$ ) are supplied to the column electrodes (6), wherein the  
5 column voltage waveform depends on the grey scale to be displayed by a driven pixel in a certain column and depends on a used selection signal ( $F_i$ ) supplied to the selected row, the column voltage ( $G_j(t)$ ) having at least two different column voltage levels during the row selection time and the column voltage waveform for a following row selection time is mirrored on a mirror axis depending on the column voltage at the end  
10 of the current row selection time and the column voltage at the end of the following row selection time.